**DATA SCIENCES, B.S. (ENGINEERING)**

**Begin Campus:** Any Penn State Campus

**End Campus:** University Park

**Suggested Academic Plan**

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2022-23 academic year. To access previous years’ suggested academic plans, please visit the archive (https://bulletins.psu.edu/undergraduate/archive/) to view the appropriate Undergraduate Bulletin edition (Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin).

**Computational Data Sciences Option: Data Sciences, B.S. at University Park Campus**

The course series listed below provides only one of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit in policies, procedures, educational offerings, and requirements at any Penn State Campus (accessible in LionPATH as either an academic plan or academic plan form). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

If you are starting at a campus other than the one this plan is ending at, please refer to: http://advising.engr.psu.edu/degree-requirements/academic-plans-by-major.aspx

### First Year

**Fall** | **Credits** | **Spring** | **Credits**
--- | --- | --- | ---
CMPS 121 or 131 (GQ)* | 3 | CMPS 122 or 132** | 3
MATH 140 (GQ)**†# | 4 | MATH 141 (GQ)**†# | 4
DS 200 or STAT 200**†# | 4 | DS 220* | 3
General Education Course | 3 | ENGL 15 (GWS)* | 3
First-Year Seminar | 1 | General Education Course | 3

| Total Credits | 15 | 16 |

**Second Year**

**Fall** | **Credits** | **Spring** | **Credits**
--- | --- | --- | ---
CMPS 221* | 3 | CMPS 360* | 3
STAT 184* | 2 | STAT 380* | 3
MATH 230* | 4 | STAT 414* | 3
MATH 220* | 2 | General Education Course | 3
CAS 100A or 100B (GWS)*† | 3 | General Education Course | 3
General Education Course | 3 |

| Total Credits | 17 | 15 |

**Third Year**

**Fall** | **Credits** | **Spring** | **Credits**
--- | --- | --- | ---
CMPS 442 or DS 442* | 3 | CMPS 410 or DS 410* | 3
CMPS 465* | 3 | CMPS 448 | 3
DS 300* | 3 | CMPS 455* | 3
STAT 415* | 3 | General Education Course | 3
General Education Course | 3 |

| Total Credits | 15 | 15 |

**Fourth Year**

**Fall** | **Credits** | **Spring** | **Credits**
--- | --- | --- | ---
DS 340W* | 3 | DS 440* | 3
List A Course | 3 | List A Course | 3
List B Course | 3 | List B Course | 3
ENGL 202C (GWS)*† | 3 | General Education Course | 3
Department List (General Elective) | 3 | Department List (General Elective) | 3
General Education Course (GHW) | 1.5 | General Education Course (GHW) | 1.5

| Total Credits | 16.5 | 16.5 |

* Course requires a grade of C or better for the major
† Course requires a grade of C or better for General Education
# Course is an Entrance to Major requirement
‡ Course satisfies General Education and degree requirement

**University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy University Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

GWS, GQ, GHW, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS, and Integrative Studies). Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

Integrative Studies courses are required for the General Education program. N is the suffix at the end of a course number used to designate an Inter-Domain course and Z is the suffix at the end of a course number used to designate a Linked course.

All incoming Schreyer Honors College first-year students at University Park will take ENGL 137H/CAS 137H in the fall semester and ENGL 138T/CAS 138T in the spring semester. These courses carry the GWS designation and replace both ENGL 30H and CAS 100. Each course is 3 credits.

**College Notes:**

- **Health and Physical Activity Elective:** Students who complete the ROTC program may substitute 3 ROTC credits for the GHW requirement.
- **Natural Sciences Elective:** Nine credits of Natural Science (GN) are required. Any GN courses except the following may be used: ASTRO 1, 7N, 10, 11, 120, 140; all BI SC courses; All courses below CHEM 110 (except 3 credits of CHEM 106 may be used); PHYS 250, 251, and any course below PHYS 211; GEOSC 20
- **OPTION A:** CMPEN 454, CMPS 450, or CMPS 456
- **OPTION B:** CMPS 431 W, EE 456, IST 441, STAT 416, or STAT 440
- **Department List Course (General Elective):** See page 13, 14, & 15 of this document: http://assets.engr.psu.edu/EECS/docs/Computational%20Data%20Sciences%202...
Data Sciences, B.S. (Engineering)

assets.engr.psu.edu/EECS/docs/Computational Data Sciences 2016.pdf)